

TOTAL

Total Petroleum, Inc.

File

US EPA RECORDS CENTER REGION 5



483394

EAST SUPERIOR STREET
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PATRICK A. LINCOLN, P.E.
CORPORATE MANAGER
ENVIRONMENTAL AFFAIRS

July 24, 1984

Mr. Delbert Rector, Chief
Hazardous Waste Division
Michigan Department of Natural Resources
Box 30028
Lansing MI 48909

Dear Mr. Rector:

You requested additional proposals on clean-up of the groundwater at our land treatment area in your letter of July 2, 1984. I am most concerned by your apparent belief that Total Petroleum is stalling in efforts to identify and correct the problem. Total is not attempting to delay progress.

Your letter in April ordered the land treatment system not be used. It has not received any waste since that time. We have continued tilling the fields to hasten degradation of those oils already in place. This first step in landfarm closure will continue for at least a year until the treatment zone oil levels stabilize. We have no intention of using the site again without your agreement. It probably will never be known whether the TOC found in the shallow groundwater layer came from land treatment operations or from the pits which formerly were in that area. It really does not matter at this point which was the source and we have not devoted any effort in trying to prove which was responsible.

We have been trying to identify what chemical constituents were causing the TOC readings. We need to know what we are attempting to treat in order to design an effective treatment and disposal plan. Staff members present at our April meeting were also concerned that, since it could not be identified, the chemical must be high weight, probably polynuclear aromatic compounds or PNA's.

Two separate Michigan laboratories had already by April failed to identify anything present in the water which could account for the TOC values. These laboratories used standard EPA protocols for GC-MS analysis. No priority pollutants, Michigan Critical Material Organics, or "Total Toxic Organics" as referenced to 48 Federal Register, No. 737 of 7/15/83 were found. Mass Spec. scans of the samples showed nothing else present up to C₂₅. One laboratory found low levels of methylene chloride and the other found low levels of a phthalate.

We contacted both Rocky Mountain Analytical and Battelle Institute to try and solve the problem. Both of these laboratories are experienced in EPA methods development and have worked on the test protocols. Rocky Mountain has finished their work and their report is attached. They confirm no priority pollutants (except for ethylhexyl phthalate which is probably laboratory contamination).

Battelle Laboratories estimated two months would be required for their more extensive research project. We have been informed that they will have a final report out some time in August. They have been able to recover some materials from the sample. Characterization indicates "nothing unusual" but the materials have not been identified completely. Standard protocols do not work and Battelle had to develop new procedures.

Total Petroleum did not intend to define contamination only in the area of the landfarm. Mr. White separated the two areas in his letter of May 1, 1984. The test wells located downgradient of the refinery require that we obtain permission to enter lands owned by others. We have permission from some land owners but are waiting for the railroad to authorize entering their right-of-way. We are told that it will be granted but they move slowly. We have already cancelled two drilling dates because we want to be able to do all the work at once rather than piecemeal wells one by one.

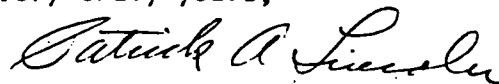
When granted permission to enter the necessary land it will require up to four weeks of field work and an additional six weeks for our consultant to design the containment and purge well systems.

Once Battelle has identified what we are dealing with in the groundwater, treatment and disposal options for the groundwater can be evaluated. We propose to use a consultant for evaluating the proper procedure. Engineering specifics, economic costs, and expected clean-up benefits of the alternatives can be supplied at that time.

Construction schedules and operation of the recovery system can not be defined at this time. Total Petroleum will proceed as quickly as possible but we can not fix a date at present. If it is necessary as you indicate it might be, to revise our NPDES permit to include recovered groundwater, we could not begin recovery operations until the permit issues.

I realize that this response does not answer some of your specific requests because it is impossible to do so at this time. Please contact either me or Mr. White if you have any questions. We will be ready to meet with your staff to discuss our progress whenever desired.

Very truly yours,



Patrick A. Lincoln

PAL:djw

att.

cc: Robert Basch, DNR ✓